

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Shunpei Yamazaki et al. Art Unit : 2624
Serial No. : 09/833,674 Examiner : Anthony M. Mackowey
Filed : April 13, 2001 Conf. No. : 2128
Title : SYSTEM AND METHOD FOR IDENTIFYING AN INDIVIDUAL

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Commissioner for Patents
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REPLY TO ACTION OF MAY 25, 2007

In response to the action of May 25, 2007, applicants asks that all claims be allowed in view of the following remarks.

Claims 1-3, 6-9, 12-35, 38-43, 46-53, 56-59, 62-85, 88-93, 96-100 and 109-116 are currently pending, of which claims 1, 7, 13, 24, 35, 39, 43, 47, 51, 57, 63, 74, 85, 89, 93 and 97 are independent. Claims 13-34, 39-42, 47-50, 63-84, 89-92 and 97-100 have been withdrawn, leaving claims 1-3, 6-9, 12, 35, 38, 43, 46, 51-53, 56-59, 62, 85, 88, 93, 96 and 109-116, including independent claims 1, 7, 35, 43, 51, 57, 85 and 93, under consideration.

Claims 1-3, 6-9, 12, 35, 38, 43, 46, 51-53, 56-59, 62, 85, 88, 93 and 96 were rejected as being unpatentable over Ritter (U.S. Patent No. 6,657,538) in view of Harkin (U.S. Patent No. 6,327,376) and Wang (U.S. Patent No. 6,175,922). Applicant requests reconsideration and withdrawal of this rejection because neither Ritter, Harkin, Wang nor any proper combination of the references describes or suggests a display device having pixels, each of which includes a light emitting element and a sensor for reading biological information of a user, as recited by each of independent claims 1, 7, 35, 43, 51, 57, 85 and 93.

As acknowledged by the rejection, Ritter does not disclose a display device having pixels, each of which includes a light emitting element and a sensor for reading biological information of a user, with the light emitting element including a cathode, a light emitting layer and an anode. See final action at page 4, lines 4-6. For these features, the rejection relies on Harkin. See final action at page 4, lines 11-17.

However, Harkin does not describe or suggest a display device having pixels, each of which includes a light emitting element. Rather, Harkin discloses a liquid crystal (LC) display

device in FIG. 6, see col. 9, lines 15-18, and, in particular, discloses that “LC display devices can be operable in a reflective mode, using for example ambient light, or in a transmissive mode in which case a backlight is normally provided adjacent the side of the device remote from the viewing side.” Harkin at col. 9, lines 26-29 (referring to FIG. 6). Notably, Harkin's LC display device requires an ambient light source or a backlight, each of which is provided outside of the display device. As such, Harkin does not disclose a display device having pixels, each of which includes a light emitting element, as recited by claims 1, 7, 35, 43, 51, 57, 85 and 93.

Harkin also shows a fingerprint sensing device in FIG. 5. However, that device does not include a display device or display elements. Rather, Harkin's FIG. 5 shows a contactless biometric sensor 60 that relies on use of light for sensing and is positioned behind the fingerprint sensing array 10. See Harkin at col. 7, line 55 to col. 8, line 1. Harkin indicates that “the sensor typically has light source, for example, LEDs, emitting red and infra-red light beams which are directed onto human tissue.” Harkin at col. 8, lines 3-5. Hence, although Harkin discloses in FIG. 5 and its related text that a sensor may have a light source, Harkin does not disclose a display device or display elements associated with the device of FIG. 5.

Moreover, even assuming for the sake or argument only that Harkin's fingerprint sensing array 10 of FIG. 5 corresponds to the claimed display device, Harkin's fingerprint sensing array fails to disclose a display device having pixels, each of which includes a light emitting element and a sensor for reading biological information of a user. Rather, Harkin's contactless biometric sensor 60, not the fingerprint sensing array 10, includes the light source.

In addition, assuming for the sake or argument only that contactless biometric sensor 60 of FIG. 5 constitutes a display device, the sensor 60 still fails to include pixels, each of which includes a light emitting element and a sensor for reading biological information of a user, since Harkin's contactless biometric sensor 60 does not include the fingerprint sensing array 10.

Accordingly, for at least these reasons, Harkin does not describe or suggest a display device having pixels, each of which includes a light emitting element and a sensor for reading biological information of a user, as recited by claims 1, 7, 35, 43, 51, 57, 85 and 93.

Applicant further notes that, in response to applicant's prior arguments, the action mischaracterizes applicant's argument that Harkin does not disclose whether or not the fingerprint sensor and thin film components required for the array are fabricated directly on the

same surface of the plate which carries the display elements as arguing limitations not present in the claims. See final action at page 3, lines 1-7 (“Response to Arguments” section). However, applicant was not asserting that these were features of the claims. Rather, applicant was rebutting the Examiner’s assertion that: “Harkin further discloses the fingerprint sensor and the thin film components required for the array may be fabricated directly on the surface of the upper plate of the display (col. 9, lines 37-40), *thus the display device has pixels including a light emitting element and a sensor for reading biological information.*” Non-final action of December 13, 2006 at page 3, lines 9-13 (emphasis added).

The rejection relies on Wang as disclosing a portable authorization device. However, Wang’s portable authorization device does not remedy Ritter’s and Harkin’s failure to describe or suggest a display device having pixels, where each pixel includes a light emitting element and a sensor for reading biological information, as recited by claims 1, 7, 35, 43, 51, 57, 85 and 93.

Accordingly, neither Ritter, Harkin, Wang, nor any proper combination of the references, describes or suggests a display device having pixels, where each pixel includes a light emitting element and a sensor for reading biological information, as recited by claims 1, 7, 35, 43, 51, 57, 85 and 93.

For at least these reasons, applicant respectfully requests reconsideration and withdrawal of the rejection of claim 1, 7, 35, 43, 51, 57, 85 and 93, and their dependent claims 2, 3, 6, 8, 9, 12, 38, 46, 52, 53, 56, 58, 59, 62, 88 and 96.

Claims 109-116 have been rejected as being unpatentable over Ritter in view of Harkin, Wang and Nishimura (U.S. Patent No. 6,040,810). Each of claims 109-116 depends from one of independent claims 1, 7, 35, 43, 51, 57, 85 and 93 and recites the sensor includes a photodiode. Nishimura is said to disclose, among other elements, a sensor that is a photodiode. Applicant requests reconsideration and withdrawal of the rejection because Nishimura’s disclosure of a sensor that is a photodiode does not remedy the failure of Ritter, Harkin and Wang to describe or suggest a display device having pixels, where each pixel includes a light emitting element and a sensor for reading biological information of a user, recited by independent claims 1, 7, 35, 43, 51, 57, 85 and 93.


Applicant submits that all claims are in condition for allowance.

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this reply should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

The fee in the amount of \$120 in payment of a one-month extension of time fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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